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NB—22—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (Second Year) (Third Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(New Pattern)

BIOTECHNOLOGY

DSEBT-4CII

(Plant Physiology)

(Wednesday, 6-12-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (i) Attempt *all* questions.

(ii) Figures to the right indicate full marks.

(iii) Illustrate your answers with suitable diagram, scheme etc.

1. Give an account of mechanism of translocation of organic solutes. 15

Or

(a) Describe diffusion and guttation. 8

(b) Give the composition of phloem sap. 7

2. Describe ultra-structure of Chloroplast and functions. 15

Or

(a) Describe photosynthetic pigments and their role. 8

(b) Describe light reaction. 7

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(2)

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3. Describe TCA cycle. 15

Or

(a) Describe chemiosmotic hypothesis of ATP synthesis. 8

(b) Describe types of respiration. 7

4. Give an account of different types of stresses in plants. 15

Or

(a) Describe Auxin and Cytokinin. 8

(b) Describe xenobiotics. 7

5. Write notes on (any *three*) : 15

(a) Abscisic acid

(b) Importance of respiration

(c) ETC

(d) CAM pathway

(e) Transpiration.

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